

# Description of Two Punctid Snail Genera from Tasmania (Mollusca : Pulmonata)

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## Introduction

The purpose of this paper is to make available or validate two names of genera of punctid snails from Tasmania which were proposed invalidly by Iredale in 1933. The generic groups for which these names were proposed are, in our opinion, real. These names have been accepted and used as valid in previous work (McMichael and Iredale, 1959; Smith and Kershaw, 1979, 1981). However, in a more critical examination of the original descriptions of the genera during work on the compilation of a check-list of the non-marine molluscs of Australia, one of us (BJS) determined that these descriptions were invalid under the International Code of Zoological Nomenclature. The descriptions are judged to be invalid as they contain no description or diagnosis of the new taxon and no differentiation with any other taxon.

The sections of the Iredale (1933) paper in which he introduces the names *Pasmaditta* and *Pedicamista* are as follows:

"*Helix jungermanniae* Petterd was allotted to *Flammulina* by Suter and the last location by May was in *Laoma*, another Neozelonica group more familiar to Suter than to May, the generic name *Pasmaditta* is here introduced".

"*Pedicamista* is proposed for *H. coesus* Cox, which was also placed by May in *Laoma*, though Suter had assigned it to *Phrixgnathus* from the type of which it differs as much as from the typical *Laoma*".

These snails belong to the family Punctidae, a modern revision of the Australian species of which is being prepared by Dr. Frank Climo of the National Museum of

New Zealand. However, we understand (F. Climo, pers. comm.) that this is still a considerable way from completion. In the meantime valid names are needed for these two genera to facilitate their inclusion in the Catalogue of the Non-Marine Molluscs of Australia. These can be amended or put into synonymy at a later date when a clearer idea emerges of their status in a revised study of the Tasmanian punctids.

## Taxonomy

*Pasmaditta* gen. nov.

*Pasmaditta* Iredale, 1933. *Rec. Aust. Mus.* 19:53 (nomen nudum).

*Diagnosis:* Shell small, planate, depressed globose, of 4-5 whorls with height less than half the width. Umbilicus narrow, about a quarter of the shell diameter. Protoconch 1.5 whorls with sculpture of very faint spiral striae, often apparently smooth. Adult sculpture of weak very low rounded irregular radial riblets, generally close, oblique with narrow sloping depression in the interstices passing into the umbilicus. Interstices with extremely fine sub-aligned pustules giving the impression of decussate striae which gives a "frosted" texture to the shell. There are also minute radial lirae. Colour brown to bronze.

*Type species:* *Helix jungermanniae* Petterd, 1879.

*Pedicamista* gen. nov.

*Pedicamista* Iredale, 1933. *Rec. Aust. Mus.* 19:53 (nomen nudum).

*Diagnosis:* Shell broadly depressed conoid, somewhat globose, 5 whorls with height about half the width. Umbilicus narrow, about a fifth of the shell diameter. Protoconch 1.75 whorls, smooth. Adult sculpture of weak low rounded riblets,

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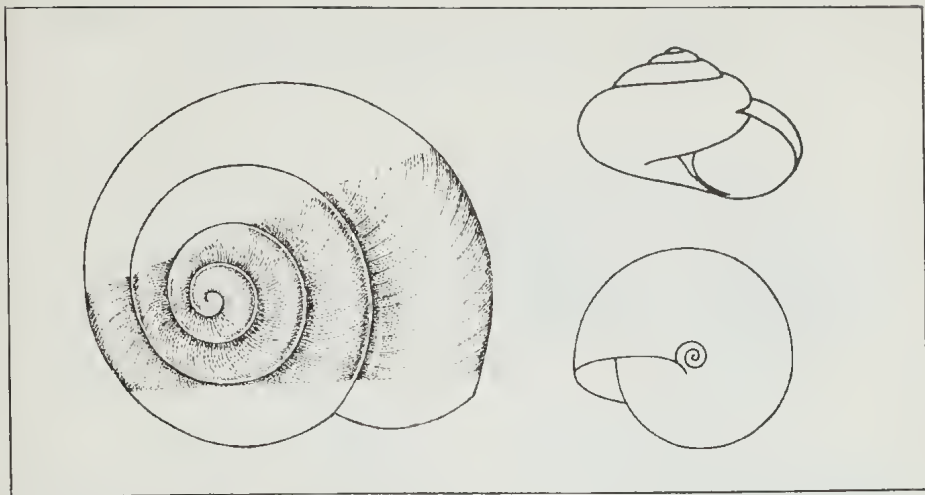


Fig. 1. *Pasmaditta jungermanniae* (Petterd, 1879)

crossed by spiral striae on the body whorl; very weak to absent on the base. Colour yellowish to brownish.

*Type species: Helix (Charopa) coesus* Legrand, 1871.

*Remarks:* The family Punctidae is a world-wide family which appears to have undergone some local radiation in Southern Australia (F. Climo — pers. comm.) (Smith, 1984). In Tasmania, besides the two genera described here there are four other punctid genera recorded for the state. These are *Paralaoma*, *Laomavix*, *Magilaoma* and *Miselaoma* (Smith and Kershaw, 1981). Two further genera are recorded from southern Victoria, and may have a Tasmanian affinity. These are *Excellaoma* and *Turbolaoma* (Smith and Kershaw, 1979).

*Pasmaditta* and *Pedicamista* can be easily separated from most of these other punctid genera by gross shell morphology as follows:—

*Laomavix* is a much smaller shell with a very wide umbilicus.

*Magilaoma* is turbinate with an elevated spine, peripheral keel and very narrow umbilicus.

*Miselaoma* is a much smaller shell with

a turbinate shell and very narrow umbilicus.

*Excellaoma* is a much larger shell with a closed to minute umbilicus.

*Turbolaoma* has a high turbinate shell and a very narrow umbilicus.

Only *Paralaoma* could be confused with these two new genera as superficially they have a similar shape and sculpture. *Paralaoma* is a widely distributed, variable group which should probably be subdivided into several generic groupings. It is characterized by its bold, spaced sculpture. Shell shape is very variable with a flattened to subconical spire, distinctly rounded whorls and rounded, descending aperture.

*Pasmaditta* does not have the bold sculpture of *Paralaoma* and the secondary sculpture is more complex. *Paralaoma* species are usually found in leaf and bark litter of dry forest areas whereas the type species of *Pasmaditta* is so far only known from under moss on sheltered delerite rock faces in the Cataract Gorge, Launceston.

*Pedicamista* also lacks the bold sculpture of *Paralaoma*. Its moderately conoid shell and broad roundly lunate aperture easily separate it from latter genus and

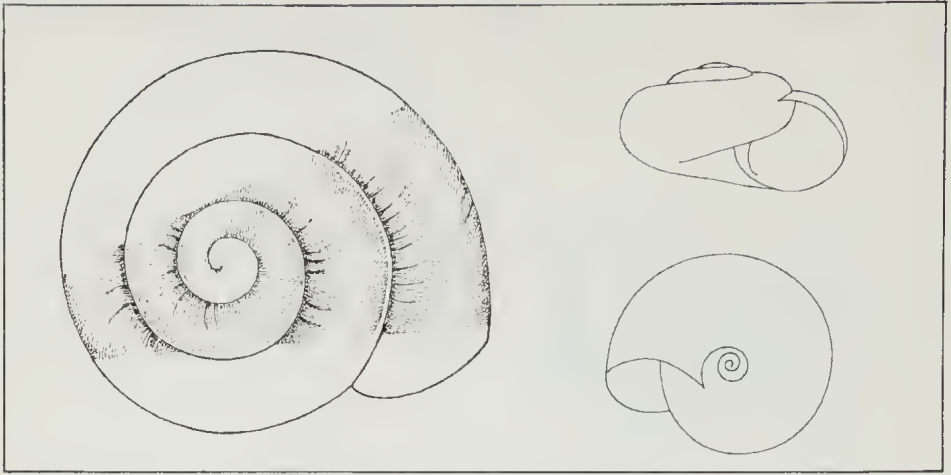


Fig. 2. *Pedicamista coesa* (Legrand, 1871).

from *Pasmaditta*. Very little is known about the habitat requirements of this genus for, although the type species was believed widely distributed in Tasmania, few specimens have survived in collections.

Solem (1983) figured the anatomy of *Pedicamista coesa* using it to illustrate "the essential unity of structure within the Punctidae" (p.54). He also made an indirect comment on the placement of the species as follows: "As a systematic comment, *Punctum* and *Paralaoma* may well be synonyms, but "*Paralaoma*" *coesa* probably does not belong to the same genus" (p. 56).

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